

Use of Peripheral Route Triggers to Test Buying Habits on Social Curating Sites

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Abstract

Ecommerce has become an increasingly visual activity as images of product fill websites, social media, and social curation sites. The Elaboration Likelihood Model has often been used to examine and explain online purchasing behavior; however, this previous research barely touches on the use of peripheral cues. In analyzing the effect of peripheral cues on buying habits when searching social curation sites, statistical results from a survey conducted using women aged 18 to 34 in the San Luis Obispo area showed that these cues made no difference on the activity of a user. Regardless of their awareness to the visual cues, subjects were not persuaded to purchase or otherwise engage with the product they viewed. As our society becomes increasing technology-centered, it is important to look at how marketing and advertising that uses imagery is affecting decision making.

Key Words:

Social Curation, Purchasing Behavior, Elaboration Likelihood Model, Social Media, Peripheral Cues

Introduction

Whose advice do you seek when shopping? For some, it is a close friend, for others it's a trusted review website. When you think about shopping in stores before the creation of the internet, your sources of advice came from the sales clerk, the people who you were shopping with, and paper or television advertisements. The introduction of the internet brought about endless sources of advice as to what a consumer should buy and why they should buy it. Furthermore, with the popularity of social networks, it comes as no surprise that these have become places to garner advice about potential purchasing decisions.

The most recent form of social network that has lent itself significantly to online purchasing is the curating site. These sites — such as Pinterest, Luvocracy, and Wanelo — allow users to collect items from around the internet and save them on convenient “boards” or “collections.” Despite their popularity, little to no research has been done concerning how the social aspect of these sites affects the purchasing decisions of the individual user. Most recently, Target (a national corporation) has begun using Pinterest as a suggestion engine by showing “popular items” like the item you are looking at (Wagner, 2013). These “popular items” are deemed so by the number of times that they have been “liked” or saved to Pinterest.

The rising use of social curating sites for ecommerce was the basis for my research project, which attempted to answer how persuasive methods in imagery affect purchasing decisions on these websites. As social curation becomes more prevalent as a form of both social media and ecommerce, it is important to examine how imagery is, and can be, used as a form of persuasion to influence an individual's purchasing decision. The current research used an experimental methodology in an attempt to discover the connection between persuasive peripheral imagery cues and the willingness of an individual to engage with a product.

Information related to social media use, demographics, and purchasing behavior are also asked of individuals to explore potential moderating effects on the relationship between imagery and ecommerce.

Literature Review

The Rise of Social Curation

Despite its fairly current rise to popularity, the idea of social curation has been roaming the internet for almost a decade. Social curation is in fact synonymous to social bookmarking — a term that has been in existence for much longer. For the purpose of this paper I used Noll and Meinel's (2007) definition of social bookmarking, which is "storing a bookmark including any additional metadata at a social bookmarking service" (p. 369). They define a social bookmarking service as "a central online service which enables users to add, modify, and delete bookmarks of web documents with additional metadata" (p. 369). This "additional metadata" is also known as tagging — a process by which one uses terms synonymous with what the document is about to file it away with other documents that are similar (p. 369). The social aspect comes into play when other people cannot only see your bookmarks, but save them under their own tags in their own categories. Like much of the rest of the internet, something as simple as saving a document or website for future use or reference has become a social phenomenon.

It wasn't long after the social acceptance of the internet that social bookmarking came into creation. The first concepts of sharing bookmarks online came from itList in 1996 and Webtagger, which was created in 1997 by the Computational Sciences Department of NASA. These websites were rudimentary in that they "enable(d) individuals and groups to store, access, and rate the utility of Web-based information with respect to their information needs" (Keller, Wolfe, Chen, Rabinowitz, & Mathe, 1997). Basically, these sites provided links to a variety of

other websites categorized by certain aspects such as “food and drink” or “women’s fashion.” However, they created the skeleton of what social curating is today. In fact, it was not until 2003 that a website similar to what we think of as social curation became popular. Delicious.com, formerly called del.icio.us, was not “unique or pioneering in its role as bookmarks manager” but in that it was the first to make tagging popular and created the term “social bookmarking” (Mathes, 2004). This website then influenced other such social bookmarking sites, the most noteworthy being Flickr. Flickr was created a year later in 2004 and morphed the tagging and bookmarking aspects of Delicious with something new — images. This then led the way to reddit — arguably one of the most popular social bookmarking sites of the decade ranked 71st globally and 28th nationally for highest website traffic (alexa.com, 2013).

The combination of social bookmarking and the use of images gave rise to the most current examples of social curation - Pinterest and Wanelo. Pinterest was founded in 2008 as a photo collecting and sharing site. What differentiated this type of site from those like reddit or Delicious was the ability to not only tag the images but to visually collect them into specific categories or collections known as “boards” (Carlson, 2012). Currently, Pinterest is ranked 27th globally and 12th nationally in website traffic. Clearly, the phenomenon of social curation has become a popular activity not only here in the United States but globally as well. With over 70 million active users worldwide it is apparent that image-based social curation is only growing in popularity (Horwitz, 2013). While Pinterest may currently be the largest social curating site, the innovation continues.

The evolution of social curation has now blended itself with the industry of ecommerce. Ecommerce or “activities that relate to the buying and selling of goods and services over the Internet” fits well with social curation as both are heavily image based (Merriam-Webster,

2014). Currently, the two fastest growing social commerce sites in terms of website visits for fashion are Wanelo and Luvocracy. Wanelo - a combination of “want,” “need,” and “love” — was created in 2010 as a social online shopping site that combines users and companies in order to sell products. To put it simply, Wanelo “lets people share items, like articles of clothing, home furnishings, beauty accessories and makeup products, for their friends and followers to see,” as well as “browse others’ items, comment on them and share them with friends” (Wortham, 2013). With 10 million users, Wanelo has a long way to go before it becomes as popular as Pinterest, but its shopping aspect gives it an edge in the social curation market.

Similarly, Luvocracy has also procured a corner of the social commerce market with its new twist on curation. Launched in the fall of 2013, Luvocracy based itself “around the concept that we buy products more when they are recommended by others” (Kelly, 2013). Unlike other social curation sites, Luvocracy does not show products that are already sold out and they give users a small percentage of a purchase if another user buys a product based off of their recommendation. While not nearly as popular as Wanelo or Pinterest, this young site focuses on something important — the sense of community amongst its users. Who do you trust more than a friend or a family member? Luvocracy plays on this aspect to create a truly social ecommerce website platform.

The history of social curation by and large informs the current experimental research using the site Haberdashion.com. Haberdashion was created in 2012 as a “website people visit to discover their fashion DNA.” Described as a combination of Pinterest and Pandora for your wardrobe, Haberdashion uses a recommendation engine based off of a user’s ratings to suggest clothing items they might like (Prentice, 2013). All products on the site are available to purchase by clicking through to the company’s website. Much like Pinterest, Wanelo, and Luvocracy, the

site allows users to post their own pictures or gather items from other websites to share with friends and fellow users. While still in beta, Haberdashion will provide the imagery needed to test persuasive methods commonly used in ecommerce.

The Use of Imagery as a Persuasive Method in Ecommerce

To affect an individual's purchasing decision is to persuade them for or against a behavior. Persuasion is a fundamental aspect of communication studies that covers a broad range of topics from speech writing to advertising, which is why it is such a prevalent topic in Communication Studies. For the purpose of this literature review, I aimed to look at how persuasive imagery has been used in previous experiments to affect the purchasing decisions or behaviors of subjects. A study done by Winn and Beck (2002) focusing on the persuasiveness of web design sectioned the results into aspects of Ethos, Logos, and Pathos. The researchers believed that "appealing to customers' reason (logos) can build credibility (ethos) and create a positive feeling about the site (pathos)" (p. 17). After conducting an experiment in which they observed subjects usage of an ecommerce website, they found that, when looking at Pathos, the main factor affecting purchasing decision was the use of attractive images. In fact one participant stated "I'm doing most of my shopping by looking at the tiny little pictures, not actually reading the descriptions" (Winn & Beck, p. 26).

Given that online shopping prevents the user from physically touching or interacting with the product, interaction has to rely purely on visual persuasion. Imagery is a vital aspect of persuasion this day in age, as society has become an especially visual-driven society — which can be seen in the use of websites such as Instagram, Tumblr, and Skype. In their discussion, Winn and Beck recognized that the need for physical interaction is not one that can be easily fulfilled by ecommerce sites. However, they did emphasize that more attention needs to be

stressed by companies, website designers, and marketers in the way of visual persuasion to be able to compete with physical stores.

There are multiple aspects that contribute to an individual's decision to purchase an item online, arguably one of the most important being the need for images. In a study conducted by Limayem, Khalifa, and Frini (2000) factors affecting online shopping behavior were observed using the Theory of Planned behavior. They focused on six different aspects of the decision making: intentions, attitude, personal innovativeness, behavioral control, subjective norms, and perceived consequences (p. 427). The use of imagery on the website was categorized under both behavioral control and perceived consequences. Admittedly, in a study that focused on so many aspects of the decision making process, the persuasiveness of the imagery alone accounted for a small percentage. The authors stated that while descriptions are needed in the decision making process, one should also consider "including product pictures to supplement these lists" (p. 428). They further emphasized that "providing and managing such information with clear and concise text coupled with appropriate pictures is essential and constitutes the primary role of the web designers and the marketers" (p. 428). The authors made the claim that a description is necessary, but so is an image, which speaks to the research done by Winn and Beck. Much like Winn and Beck, the imagery is used as a mechanism to compensate for the lack of tangibility and the inability to have the feel of a physical store and shopping experience. This focus on imagery led me to the main aspect of my research project, which examined how certain images, with persuasive and theoretical underpinnings, affected purchasing decisions.

Theoretical Perspective

Elaboration Likelihood Model

Petty and Cacioppo's Elaboration Likelihood Model (ELM) (1986) formed the theoretical foundation for the current experiment. In this model, Petty and Cacioppo purport that there are two cognitive processes that can take place during decision-making — the central route and the peripheral route. The central route involves “message elaboration” (Griffin, 2013, p. 206). When using the central route, one is most likely scrutinizing an idea, carefully weighing aspects of the message and its implications. In opposition, the peripheral route is a sort of “mental shortcut” that allows one to “rely on a variety of cues... to make quick decisions” (p. 206). For a simplified example, when looking to purchase an item online a consumer would use their central route to read the description, look up the validity of the website, ensure that the item had an overall good rating, and that the price was reasonable. The same consumer would be using the peripheral route by looking at the imagery, deciding whether or not the item looked how they wanted it to. According to Petty and Cacioppo, previous research showed that most decisions were made using the central route, but this is changing (1986, p.128).

When shopping online, one has a plethora of cues to attend to in order to make a purchasing decision, which is why the ELM has been used to examine ecommerce and purchasing behavior. San Martin, Camarero, and San Jose (2011) examined levels of involvement in online shopping using the Elaboration Likelihood Model. The goal of the study was to “estimate the effect of company and Web site characteristics on satisfaction and trust and the moderating effect of involvement by means of a multigroup analysis” (p. 153). They divided the subjects into two categories, high and low involvement. Those subjects with high involvement had involvement levels higher than the mean, and those with lower were under the

mean (p. 153). They found that the design of the site had little effect on the satisfaction of the buyers, nor did the interactive experience. However, they found that “both high- and low-involvement buyers appear[ed] to follow the peripheral route” (San Martin, Camarero, & San Jose, p. 159). In fact, they urged scholars to consider the Modified Elaboration Likelihood Model because this would “take into account the influence of peripheral cues on the satisfaction of high-involvement individuals (or the combined influence of central and peripheral routes in high-involvement contexts) and to encompass the peculiarities of the online context” (p. 159). The Modified Elaboration Likelihood Model was created to decipher the persuasiveness of online advertising and alters the process to account for aspects that are unique to the internet. Included in this model is the acknowledgement of “vehicle exposure” which is how or where the ads are placed. There is a differentiation between voluntary and involuntary exposure which can positively or negatively affect how the ad is processed. Most importantly, the Modified Elaboration Likelihood Model gives more weight to the ability to process a peripheral cue and the potential for an attitude shift (Cho, 1999). Given that the researchers’ primary focus was on satisfaction and not necessarily persuasion, I felt that the Elaboration Likelihood Model was still an accurate perspective to take for this experiment. However, it is noteworthy to recognize that the peripheral route does have more of an emphasis in online environments. Therefore, through my study I aimed to expand their findings by using images that related directly to the peripheral route.

While the peripheral route may require less conscious thought, there are multiple aspects to this course of decision making. Cacioppo identified six cues that “trigger” the peripheral route: reciprocation, consistency, social proof, liking, authority, and scarcity (Griffin, 2013, p. 206). The three that I found the most interesting and applicable to ecommerce were “authority,”

“scarcity,” and “social proof”. For the purpose of this study, authority was defined as “an expert or someone with influence,” scarcity as something that “involves a limited-time offer or a limited supply,” and social proof as “everyone’s doing it” (Fleming, n.d.). For the purpose of the current experiment, specific images represented each of these “cues” which were attached in some way to images of clothing.

In a study that aimed to explain consumer acceptance of online shopping, Zhou, Dai, and Zhong (2007) found nine different factors. They defined “acceptance of online shopping” as any of those factors, such as demographics, online experience, personal traits, and shopping motivation, which makes a consumer more or less inclined to shop online (p. 42-43). Their research showed that referent influence is a prominent factor of online shopping; therefore, something that is popular becomes a social cue (Zhou et al., p. 47). They found that, in particular, women were more influenced by recommendations than men and that referent influence may be affected by the type of product being purchased. While an appeal to authority has merit, this cue will only take hold to those users who are familiar with the website or the authority figure who is attempting to persuade their purchasing decision. Furthermore, an appeal to scarcity may be a middle ground cue. Those who already have a penchant for impulse buying may take the cue more persuasively than those who are more cautious with their buying habits.

Rationale and Research Questions

Internet usage is only continuing to grow, and not just in the United States. With the ceaseless growth of the internet also comes the rise of ecommerce and social media worldwide. Avid social media users, especially those who use social curation sites, will naturally view more ecommerce through these sites than those who do not because ecommerce has become integrated into these sites. Similarly, this makes them more susceptible to the persuasiveness of the images.

While little research has been done on the use of imagery in the decision making process through social curation or ecommerce sites, the purpose of this research was to unearth some information on how peripheral cues might be used as a persuasive image. These peripheral cue “tags” were created not only with the peripheral shortcuts in mind but also the demographics of the audience that took the survey. This means that the tags were meant to be visually appealing, fitting for the website they were supposed to come from, but not too blatant. As stated in the literature review, there are seven peripheral route shortcuts, but for the purpose of the study only the three that were most likely to be most relevant to social curation and purchasing decisions were utilized.

Given that current ecommerce is becoming entangled with social curation for the demographic sampled in this study, and ecommerce advertisements are on virtually every social site, one’s use of social media should be noteworthy to examine the potential correlation.

Furthermore, given that so many sites ask to link with social media, the connection should be further investigated. Therefore, another aspect of this study was to understand the relationship between a user’s use of social media sites and their level of susceptibility of peripheral cues.

Based on the given rationale, the following hypothesis and research questions were proposed:

H1: The image with the “social proof” tag will receive the most engagement out of the four images.

RQ1: How does the presence of a peripheral cue tag affect the potential purchasing decision of the subject?

RQ2: How does social media usage moderate the effect of the peripheral route triggers on engagement?

Method

Sample

This study was conducted using a snowball sample collected through social networking sites such as Facebook. Using Facebook in order to obtain the sample for this study was the best way to gain a legitimate sample of the target demographic. As stated, members of the college-age demographic are avid users of social media and arguably the last group of dedicated Facebook users. Other methods, such as in-person surveys, may not have gained the wanted number of respondents or, possibly gained respondents who do not fit the demographic criteria. I believe that this method obtained the most comprehensive and valuable sample of the key demographic subjects. By the end of the study, 125 responses were accumulated. The sample included only females as that was the intended target, primarily focused at the college age. While the sample included an age range from 17 to 39, about 87% were between the ages of 18 and 24 with a mean of 21.34 and standard deviation of 4.34. Three subjects were eliminated from the analysis because their age fell outside of the target demographic. Given that the sample was pooled through Facebook friends of those going to school or working in San Luis Obispo, it is believed that a majority of the subjects were living in the San Luis Obispo area, or areas within California.

Procedure

In order to conduct the experiment, four surveys were created on Google Survey. Each survey asked the same questions, but the image in three versions had a different social cue tag, the fourth version had no social cue tag. The survey was posted on Facebook by eight people, including the researcher, four of which were associated with both Haberdashion and different sororities in San Luis Obispo. The other four were women ages twenty to twenty-four who lived

in California with a large sample of female Facebook friends in the targeted demographic age range. Each individual posted the survey twice throughout the two weeks spanning February 10th -21st, 2014 with the same generic wording.

The survey consisted of thirteen questions ranging from personal demographic data, to social media usage, to rating images in relation to purchasing decisions. A majority of the questions were multiple choice or rating on a 5 point Likert Scale. Prior to the survey itself, I included a brief description of the aim of the survey and the project over all. This was a prime place for me to disclose the “possibility” of potential image tags. Those taking the survey were informed that, because the images came from the Haberdashion website, they may see one of three common tags. Then I was able to display and explain each of the tags. This provided a basis of recognition so that I could test whether or not they were persuasively effective (see Figure 1).

Measures

Social media usage. In order to determine general comfort level with social media and social curation sites, I asked to which sites they belonged and how much time they spent on them (ranging from “never” to “very often”). On average, of the 125 sampled females, average Facebook usage is 4.61 which translates to between “often” and “very often”. Of the social media usage measured, Facebook was the most used site. The next most used social media site was Instagram with a mean of 3.79, translating to between “not very often” and “often”. Of those surveyed, 77% belonged to at least one social curating site. This site could be Pinterest, Wanelo, Luvocracy, or Haberdashion. However, the usage of these sites was low, with Pinterest averaging 2.92 between “rarely” and “not very often”.

Online purchasing habits. The next set of questions dealt with general online purchasing habits. These questions were asked to gauge not only how often people purchase clothing online, but also how often they buy through social curating sites such as Pinterest. The aim of these questions was to be used as a comparison of the likelihood that they would purchase the later item through the Haberdashion website.

Dependent measures. The next set of questions had to do directly with the clothing item and the persuasive tag. At the top of the page an image taken from the Haberdashion website was displayed with one of the persuasive tags in the bottom right hand corner. Following the image were questions that pertained to likelihood of engagement ranging from rating the image to purchasing it. I also asked the subjects to rate the image in order to clarify if likeability affects likelihood to engage. I asked them to rate the likelihood on a 5 point Likert scale that they would purchase the item, but I clarified that they should assume they were looking for an item like the one pictured. I did not clarify on any other questions aside from this one, but I felt that it was necessary to rule out the possibility that someone would rate it a 1 not because they didn't like the item, but because they didn't need it. When asked how likely they would be to rate the product pictured, subjects' likelihood averaged 2.26 or between "unlikely" and "neither likely nor unlikely" with a standard deviation of 1.15. When asked to rate the item pictured, the average rating was a 3.20 out of 5 with a standard deviation of .90. Finally, when asked how likely they would be to save the item to purchase later, the average likelihood was 2.03 or "unlikely," with a standard deviation of 1.09.

Manipulation check. The last question asked in the survey was a manipulation check. Arguably the most important question on the survey, I asked subjects to select which tag they saw on the previous image. This allowed me to analyze the connection between awareness of the

social cue present in the image and the likelihood to purchase the product pictured. When asked to record which tag was viewed, only 70.4% of subjects accurately reported their persuasive tag. Furthermore, of the four conditions, those who viewed an image with no tag reported as such most accurately at 97.2%. Of the thirty subjects sampled in each group, at least fifteen were able to accurately report the persuasive tag viewed.

Stimulus Materials

The product pictured was a plain black fitted t shirt. I purposefully chose this product because I felt like it was the least likely to alter a person's purchasing decision based on their feeling towards it. In other words, everyone most likely owns a black t-shirt and finds some sort of value in them. Additionally, all of the tag images are the same color. This was done for two reasons. The first is that it is in line with the Haberdashion branding. Not only does it make the images look more believable, it rules out the potential confusion of subjects who actually are familiar with the Haberdashion website. Secondly, the bright red really stands out in contrast to the product image and the rest of the survey page which increases the chance that it will be noticed by the subject (see Appendix A).

As stated in the literature review, the three tag images were selected based on common peripheral cue shortcuts. The first, authority, was represented through the "Haberdashion pick." This is theoretically a product that was selected by the "fashionistas" who work at Haberdashion, therefore Haberdashion itself. This cue was represented by an image of Haberdashion's logo — a cursive "H." The next shortcut, scarcity, was represented by the "trending" image. This signifies a product that is currently "on the rise" among users and has begun to quickly gain popularity and should be purchased before it is sold out. "Trending" was represented by an image of a trending chart. Lastly, social proof was represented by a "popular" image. Popularity implies that

the product is one of the top collected or purchased products by users. This was represented through a fire symbol.

Results

Hypothesis 1 predicted that the image with the social or “popular” tag would elicit a higher level of engagement than the other tags. This was tested through the subjects’ likelihood to rate, save, and ultimately purchase the product. To test this hypothesis, four separate between-subjects one-tailed ANOVA tests were completed to test for both within and between group variability on the dependent variable, level of engagement, based on the level of the independent variable, the persuasive tag. This test was chosen based on the continuous nature of our dependent variable and the four levels of the independent variable.

The results for the ANOVA run for likelihood to rate the item were: $F(3,121) = .303$ $p = .823$. For likelihood to rate the item, the data is not significant and therefore I am unable to reject the null hypothesis. There appears to be no relationship between the social tag and a subject’s likelihood to rate the product viewed. Furthermore, the ANOVA run for likelihood to save the item yielded results of: $F(3,120) = .814$ $p = .489$. The ANOVA for likelihood to purchase yielded similar results of: $F(3, 121) = .438$ $p = .726$. Lastly, the ANOVA for star rating produced results of: $F(3, 121) = .730$ $p = .536$. Given these results I cannot reject the null hypothesis. When analyzing the data, a further attempt was made to only use those subjects who accurately named the tag to which they were exposed; however, this also yielded insignificant results (see Tables 1 and 2).

Research Question 1 explored the effect of the presence of a persuasive peripheral cue on engagement and potential purchasing decision. Given that the null Hypothesis 1 was not rejected,

it can be deduced that given the data, there is no connection between presence of the persuasive image tag and the dependent measures.

Research Question 2 examined the relationship between social media usage and the effect of the persuasive image tag. After running a correlation table, some interesting findings were recorded (Table 3). There was a positive correlation, $r = .249$ $p < .01$, between Facebook usage and the number of times a subject has purchased clothing online. This was also the case with Pinterest and number of items purchased, having a correlation of $r = .332$ $p < .001$; however, this seems more logical as Pinterest tends to be used as a shopping site. More difficult to interpret is the correlation between Twitter usage and likelihood save the item to purchase later, which is $r = .225$, $p < .05$. While there are some correlations between social media usage and engagement, no one social media site appeared to predict uniformly across all forms of engagement. The correlation showed that, while each social media site may significantly correlate to an engagement activity, no one site had more than one or two correlations. Furthermore, many of the correlations were connections that were fairly predictable, such as usage of Pinterest and likelihood to purchase from a curating site.

Discussion

The purpose of this research was to examine how peripheral cue tags affect the purchasing decision of an individual on a social curation site. I aimed to examine the connection of the persuasiveness of the peripheral “shortcut” and the engagement with clothing items online, such as purchasing the item or saving it to purchase later. Through the analysis of the data, I cannot draw a conclusion as to the connection between persuasive peripheral cues and purchasing decisions through social curation sites. Additionally, the null hypothesis is accepted in that the “social” tag was not the most persuasive of the peripheral tags. There were some

findings drawn as to the survey subjects' use of social media and their purchasing decisions. For instance, there was a strong correlation between likelihood to purchase an item through a social curation site and the use of Pinterest. Likewise, the strong correlation between Facebook usage and likelihood to make an online purchase is noteworthy. This finding in particular puts merit behind Facebook's push to put advertising for particular items a user has searched for on his or her newsfeed.

When dealing with peripheral cues, the idea can be entertained that the null hypothesis is correct, and the cues really don't matter. As a society engorged with technology, there is a very real possibility that our methods of decision making have altered. Perhaps, because we spend so much time on our phones, in front of televisions and computer screens constantly taking in images, peripheral cues are obsolete. Images can no longer be used to make immediate decisions because imagery holds so much more meaning in everyday life. Furthermore, this "overload" of imagery could hinder our ability to make decisions using peripheral cues purely because of a sort of visual overload. Couldn't it be possible that an abundance of persuasive images actually makes the decision making process more difficult? All of these ideas could provide for further research in the area of persuasive imagery and peripheral route triggers.

There are multiple possibilities as to why this research produced insignificant results, such as the sample, question choice, and image choice. The survey was conducted using a snowball sample through posting on Facebook. Therefore, the subjects were most likely friends or friends of friends of the researcher and therefore may not have been representative of the sample of interest. This would limit the generalizability of the findings to mainly those women who lived in or near California and were middle to upper middle class. In order to correct this, the survey could be distributed to a larger, more randomized sample of individuals. Additionally,

the survey was only distributed to females. Future research could find value in distributing the survey to both males and females. Surveying both genders may yield different results and would provide more insight into the online purchasing decisions of males.

An additional limitation to the research study was the types of questions asked. Admittedly, the correlation between persuasive images and purchasing decisions was deceptively tricky to form into simple questions. While I feel that my questions got to the point of the study, more thorough questioning could have filled in some of the missing areas of the study. It also may have been useful to add a section that inquired about persuasiveness and vulnerability to advertising and marketing tactics. As these would be self-reported, there is no guarantee that the responses would be honest, but there is the opportunity for interesting research. These questions could provide a stronger link between the persuasiveness of peripheral cues and the actual purchasing habits or likelihood of purchasing by the subject. Lastly, there could be interesting data found in asking subjects more in-depth questions about their normal online purchasing habits. By doing this, the researcher could decipher whether they are more likely to use the central or peripheral route when online shopping. This would then make the subject either more or less likely to be persuaded by the peripheral cue image.

Yet another limitation to the study was the images chosen to act as both the product and the peripheral cues. When asked to rate the product, subjects gave it an average of 3.20 stars, which translates to a fairly neutral rating — neither a like nor a dislike. This could have potentially affected the rating of the questions that followed after it which dealt with higher levels of engagement. When picking an item that has the potential to be universally liked by all subjects, it may have been more productive to choose an “on trend” item as opposed to a staple wardrobe piece. Furthermore, there is the possibility that the peripheral cue images were not

appealing to the subjects. In theory, if those images are not appealing then the subjects would not pay attention to them and therefore they would not be utilized to make a decision. The peripheral cue images were created based on the branding of the website I was working with, however, it would be interesting to look into color choice and size as a way of attracting attention.

The final limitation centers on the manipulation check in the last question. The final question asked subjects to select the peripheral cue image that they viewed earlier on in the survey. However, this question did not include the image itself. Given that only 70.4% of subjects reported the tag correctly, there is a chance that they simply could not remember. Or, as previously stated, subjects may not have even noticed the image in the first place. Additionally, they may not have even read the directions in the beginning. There is also the possibility that the image itself was not a clear enough representation of the tag that it stood for. All of these possibilities could lead to confusion and misrepresentation of the peripheral cue tag.

After conducting and analyzing the current study there is a lot of room for future research on the subject. After recording the correlation between use of social curation sites and online purchasing, it seems like there is more to explore. Those subjects who frequently used social curation sites were more likely to purchase items through said sites. Therefore, it would be interesting to conduct this study only with those subjects who considered themselves avid users of social curation sites. Not only are they more comfortable with the format and workings of these sites, they are clearly more comfortable making a purchasing decision through these locations. Therefore for future research I would suggest the following research question:

RQ3: How does avid use of social curation sites affect the persuasiveness of peripheral cue images in an online purchasing decision?

While this research study resulted in little significant results and many limitations, there is some practical value to be seen. For those companies who deal with ecommerce and those marketing and advertising companies who create content pushing people to engage with products online, peripheral cue research is vital. As stated earlier, our world is increasingly digital and increasingly social and both of these areas are only going to continue to grow. A market that is taking advantage of these two growing entities is the social curation website. Therefore, finding a method of advertising and marketing that encompasses these two areas through a social curation site while using aspects such as persuasive peripheral cues will only benefit those forward-thinking companies.

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Figures

Instructions

Thank you for participating in this survey! Our goal for this questionnaire is to find out how women like you interact with social media sites connected to online retailers. This survey was created with the help of Haberdashion, an online fashion curating site much like Pinterest or Wanelo. On the following page you will be asked 13 simple, short questions to help us understand your online purchasing behavior. You will be given a random image from the Haberdashion beta website to interact with. As this image comes directly from the beta site you may see one of the following tags.

Popular: An item that has been one of the top “collected” (saved) images by users.



Haberdashion Pick: An item selected as a favorite by the fashionistas that make up the Haberdashion team.



Trending: An item that is currently “on the rise” and has begun to gain popularity among users. In other words, it is quickly making its way to the “popular” list!



Figure 1. Persuasive peripheral cue images used in experimental design.

Tables

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Likelihood to Rate	Between Groups	1.222	3	.407	.303	.823
	Within Groups	162.586	121	1.344		
	Total	163.808	124			
Likelihood to Save Item	Between Groups	3.007	3	1.002	.814	.489
	Within Groups	147.791	120	1.232		
	Total	150.798	123			
Likelihood to Purchase	Between Groups	2.390	3	.797	.438	.726
	Within Groups	219.962	121	1.818		
	Total	222.352	124			
Star Rating	Between Groups	1.777	3	.592	.730	.536
	Within Groups	98.223	121	.812		
	Total	100.000	124			

Table 1. Between subjects, one tailed ANOVA tests for the four independent variables.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Likelihood to Rate	Between Groups	3.077	3	1.026	.810	.492
	Within Groups	106.378	84	1.266		
	Total	109.455	87			
Likelihood to Save Item	Between Groups	3.975	3	1.325	1.100	.354
	Within Groups	99.979	83	1.205		
	Total	103.954	86			
Likelihood to Purchase	Between Groups	5.951	3	1.984	1.240	.301
	Within Groups	134.412	84	1.600		
	Total	140.364	87			
Star Rating	Between Groups	1.645	3	.548	.624	.601
	Within Groups	73.810	84	.879		
	Total	75.455	87			

Table 2. Between subjects, one tailed ANOVA tests for the four independent variables, excluding those subjects who incorrectly identified the peripheral cue.

Correlations

	Facebook Usage	Number of Purchases Made Online in Last Month	Pinterest Usage	Likelihood to Purchase Online	Twitter Usage	Likelihood to Save Item
Pearson Correlation	1	.249**	.041	.050	.032	-.117
Sig. (2-tailed)		.006	.653	.593	.731	.203
N	121	121	121	118	117	120
Pearson Correlation	.249**	1	.332**	-.015	.155	.250**
Sig. (2-tailed)	.006		.000	.869	.094	.005
N	121	123	123	120	118	122
Pearson Correlation	.041	.332**	1	.038	.108	.153
Sig. (2-tailed)	.653	.000		.678	.242	.093
N	121	123	123	120	118	122
Pearson Correlation	.050	-.015	.038	1	.091	.125
Sig. (2-tailed)	.593	.869	.678		.335	.176
N	118	120	120	120	115	119
Pearson Correlation	.032	.155	.108	.091	1	.225*
Sig. (2-tailed)	.731	.094	.242	.335		.015
N	117	118	118	115	118	117
Pearson Correlation	-.117	.250**	.153	.125	.225*	1
Sig. (2-tailed)	.203	.005	.093	.176	.015	
N	120	122	122	119	117	122

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 3. Correlation table of social media use and purchasing engagement.

Appendix A: Survey

Online Shopping Behavior and Social Media

Instructions:

Thank you for participating in this survey! Our goal for this questionnaire is to find out how women like you interact with social media sites connected to online retailers. This survey was created with the help of Haberdashion, an online fashion curating site much like Pinterest or Wanelo. On the following page you will be asked 13 simple, short questions to help us understand your online purchasing behavior. You will be given a random image from the Haberdashion beta website to interact with. As this image comes directly from the beta site you may see one of the following tags.



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Trending: An item that is currently “on the rise” and has begun to gain popularity among users. In other words, it is quickly making its way to the “popular” list!



Haberdashion Pick: An item selected as a favorite by the fashionistas that make up the Haberdashion team.

We ask that you answer all questions to the best of your ability and that you give your honest answer to help us gather accurate data. We greatly appreciate your participation!

1. Gender

Male: ____

Female: ____

Other: ____

2. Age (numerical answer in years): ____

3. Annual Income

Please provide your personal income or, if still dependent on parents, your parents' annual income.

\$0-10,000: ____

\$46,000-55,000 ____

\$76,000-85,000 ____

\$11,000-25,000 ____

\$56,000-65,000 ____

\$85,000-95,000 ____

\$26,000-35,000 ____

\$66,000-75,000 ____

\$96,000 + ____

\$36,000-45,000 ____

4. To which social media sites do you have an account? (Check all that apply)

Facebook: ____

Instagram: ____

Pinterest: ____

Twitter: ____

Wanelo: ____

Tumblr: ____

Luvocracy: ____

Haberdashion: ____

5. Rank your usage of the above social media sites on a scale of never to very often:

	Never	Rarely	Not very often	Often	Very Often
Facebook					
Instagram					
Pinterest					
Twitter					
Wanelo					
Tumblr					
Luvocracy					
Haberdashion					

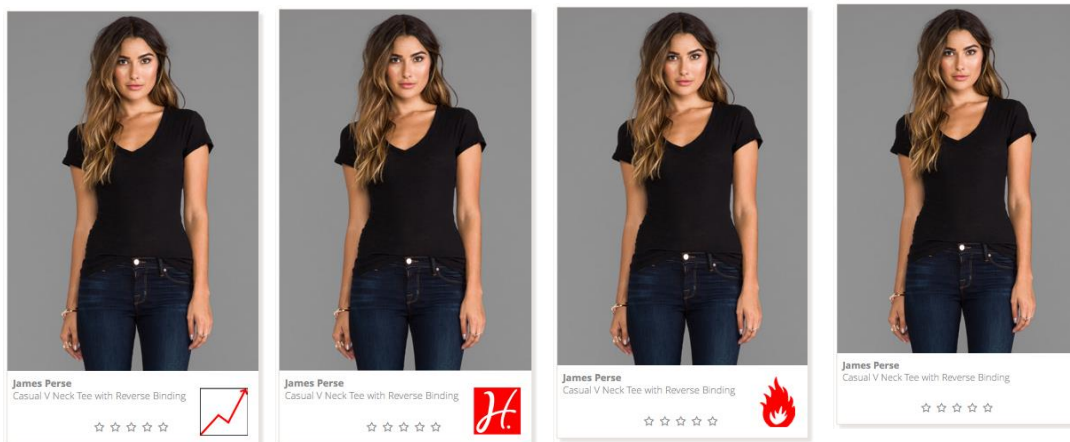
6. How likely are you to purchase something on the internet?

Very Unlikely:___ Somewhat Unlikely:___ Somewhat Likely ___Likely:___ Very Likely:___

7. How many times in the last month have you purchased clothing online?
___ times

8. How likely are you to purchase something you find on a (curating?) site such as Pinterest?

Very Unlikely:___ Somewhat Unlikely:___ Somewhat Likely ___Likely:___ Very Likely:___



(Subjects viewed only one of the four images in the survey)

9. How likely would you be to rate this item?

Very Unlikely:___ Somewhat Unlikely:___ Somewhat Likely ___Likely:___ Very Likely:___

10. On the scale of one to five stars, what would you rate this item?

1 Star:___ 2 Stars:___ 3 Stars:___ 4 Stars:___ 5 Stars:___

11. How likely would you be to save this item to potentially purchase it later?

Very Unlikely:___ Somewhat Unlikely:___ Somewhat Likely ___Likely:___ Very Likely:___

12. If you were looking for an item like this, how likely would you be to buy it by clicking on this image?

Very Unlikely:___ Somewhat Unlikely:___ Somewhat Likely ___Likely:___ Very Likely:___

13. Were you aware of the presence of any of the following tags in the image you just viewed?

Popular___ Trending___ Haberdashion pick ___ None___